CLAIMS:

1. An apparatus for forming grooves in the surface of a road, the apparatus including, a frame adapted to be attached to and carried by a vehicle, a rotatable cutting cylinder mounted on the frame for rotation about its longitudinal axis, said axis being substantially horizontal, means carried by the frame for moving said cylinder alternately up and down, and means carried by the frame for rotating said cylinder, whereby the apparatus forms a plurality of parallel grooves in the surface of a road as the frame is carried along the road at substantial uniform speed without stopping and indexing as each individual groove is cut in the road surface.

2. The apparatus of claim 1 including means to limit the depth of downward travel of said cylinder, to thereby limit the depth of the grooves formed by the cylinder.

3. The apparatus of claim 2 wherein said depth limiting means includes at least one wheel carried by and at least partially supporting said frame, said wheel adapted to engage a road surface.

4. The apparatus of claim 1 wherein said means for moving said cylinder up and down includes a linear hydraulic motor.

5. The apparatus of claim 2 wherein said depth limiting means includes three wheels, two of which are mounted on the frame on one side of the cutting cylinder and one of which is mounted in the frame on the other side of the cutting cylinder.

6. The apparatus of claim 1 including means for

spraying a liquid onto a region adjacent the lower portion of at least one side of said cylinder.

7. A method of forming a plurality of grooves in the surface of a road, the method including the steps of rotating a cutting cylinder about an axis which is substantially horizontal and which axis is at an angle to the longitudinal direction of the road, moving the rotating cutting cylinder along the road, and simultaneously, moving said cylinder alternately up above the road surface and down into said road surface, to thereby form a plurality of generally parallel grooves in the road.

8. The method of claim 7 wherein said cylinder is moved so that the grooves are formed along at least one edge of the road surface.

9. The method of claim 7 including the additional step of coating at least a portion of the forward side wall of each groove with a retro reflective coating, whereby said coating will be visible to motorists during hours of both darkness and rain.

10. A road marker system including a road having a shoulder below an edge of the road, a plurality of grooves intersecting said edge of said road and having portions which extend into the road surface, the longitudinal axis of each groove being at an angle to the longitudinal axis of the road, the grooves having slanted or arcuate sides, at least a portion of said slanted or arcuate groove sides being coated with a retro reflective coating, the bottoms of the grooves being either horizontal or slanted downwardly towards said road edge, the groove bottoms adjacent said road shoulder being even with or above said shoulder, whereby rain water will run off the sides of the grooves and into the bottoms of the grooves and out of said bottoms to said road edge and onto said shoulder, to

thereby maintain the retro reflective coating free of water so that said coating will be visible to thereby make said road edge visible to motorists during hours of both darkness and rain, and whereby when glare on the road is present from illumination other than from headlights of the driver, a series of shadow depressions will be seen by the driver.

11. The road marker system of claim 10 wherein the forwardmost groove wall sides are of a different steepness than that of the trailing groove wall sides.